CASE D0076 NP

FILING BY "EXPRESS MAIL" UNDER 37 CFR 1.10

EI984308447US	January 14, 2004
Express Mail Label Number	Date of Deposit

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

CHANG ET AL.

APPLICATION NO: 10/056,884

FILED: JANUARY 24, 2002

FOR: POLYNUCLEOTIDE ENCODING A NOVEL HUMAN POTASSIUM CHANNEL BETA-SUBUNIT, K+BETAM2

Mail Stop Sequence
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUBMISSION OF SUBSTITUTE SEQUENCE LISTING
INCLUDING STATEMENT OF VERIFICATION

Sir:

Applicants hereby provide a Computer Readable Form of the Substitute Sequence Listing as well as the Paper Copy thereof. The undersigned states that the Paper Copy and the Computer Readable Form, submitted in accordance with 37 CFR §1.821(c) and (e), respectively, are the same.

Respectfully submitted,

John A. Lamerdin, Ph.D.
Attorney for Applicants
Reg. No. 44,858

Bristol-Myers Squibb Company
Patent Department
P.O. Box 4000
Princeton, NJ 08543-4000
609-252-3575
Date: January 14, 2004

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Statement of Public Access to ATCC Deposit No. PTA-2966

Applicants representative hereby gives the following assurance by signature below:

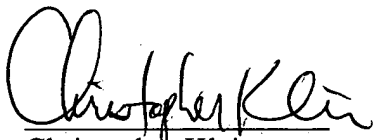
Bristol-Myers Squibb Company, an assignee of the present application, has deposited biological material under the terms of the Budapest Treaty on the International Recognition of the Deposit of Micro-organisms for the Purposes of Patent Procedure with the following International Depository Authority: American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, Virginia 20110-2209. This deposit comprises K+betaM2 cDNA (in pSPORT) encoding the human K+betaM2 polypeptide of the present invention. The deposit for the cDNA encoding human K+betaM2 was received and accepted on January 24, 2001, and given ATCC Accession Number PTA-2966.

In accordance with MPEP 2410.01 and 37 C.F.R. §1.808, assurance is hereby given that all restrictions on the availability to the public of ATCC Accession Number PTA-2966 will be irrevocably removed upon the grant of a patent based on the captioned application, except as permitted under 37 C.F.R. §1.808(b).

A copy of the ATCC Deposit receipt for Accession Number PTA-2966 is enclosed herewith.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,



Christopher Klein
Senior Counsel
Reg. No. 34,363

Bristol-Myers Squibb Company
Patent Department
P.O. Box 4000
Princeton, NJ 08543-4000
609-252-3953
Date: January 14, 2004

D0076

ATCC

10801 University Blvd o Manassas, VA 20110-2209 o Telephone: 703-365-2700 o FAX: 703-365-2745

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF
THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT ISSUED PURSUANT TO RULE 7.3
AND VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

To: (Name and Address of Depositor or Attorney)

Bristol-Myers Squibb Company
Attn: John Feder
P.O. Box 5400
Princeton, NJ 08543

Deposited on Behalf of: Bristol-Myers Squibb Company

Identification Reference by Depositor:	**Patent Deposit Designation**
Human cDNA inserts cloned into vector pSPORT; gene names are- HGPRBMY8, HGPRBMY23, BMY-HPP5, HGPRBMY7, CGR1, K+betaM2, K+alphaM1 (FL): BMS Group B	PTA-2966

The deposit was accompanied by: __ a scientific description _ a proposed taxonomic description indicated above.

The deposit was received January 24, 2001 by this International Depository Authority and has been accepted.

AT YOUR REQUEST: X We will inform you of requests for the strain for 30 years.

The strain will be made available if a patent office signatory to the Budapest Treaty certifies one's right to receive, or if a U.S. Patent is issued citing the strain, and ATCC is instructed by the United States Patent & Trademark Office or the depositor to release said strain.

If the culture should die or be destroyed during the effective term of the deposit, it shall be your responsibility to replace it with living culture of the same.

The strain will be maintained for a period of at least 30 years from date of deposit, or five years after the most recent request for a sample, whichever is longer. The United States and many other countries are signatory to the Budapest Treaty.

The viability of the culture cited above was tested January 31, 2001. On that date, the culture was viable.

International Depository Authority: American Type Culture Collection, Manassas, VA 20110-2209 USA.

Signature of person having authority to represent ATCC:

Tanya Nunnally, Patent Specialist, Patent Depository

Date: February 5, 2001

cc: Stephen Damico
(Ref: Docket or Case No.: D0044, D0047, D0077, D0072, D0079, D0076, D0050)

which include neurological disorders, tumor driven diseases, metabolic diseases, cardiac diseases, and autoimmune diseases. Examples of disease states and conditions from these and other classes, as well as affected normal body functions, encompass: hypoglycemia, anoxia/hypoxia, renal disease, osteoporosis, hyperkalemia, hypokalemia, hypertension, Addison's disease, abnormal apoptosis, induced apoptosis, clotting, modulation of acetylcholine function, and modulation of monoaminesepilepsy, allergic encephalomyelitis, multiple sclerosis (any demylelinating disease), acute traverse myelitis, neurofibromatosis, cardioplegia, cardiomyopathy, ischemia, ischemia reperfusion, cerebral ischemia, sickle cell anemia, cardiac arrythmias, peripheral monocuropathy, polynucuropathy, Gullain-Barre' Syndrome, peroneal muscular dystrophy, neuropathies, Parkinson's disease, palsies, cerebral palsy, progressive supranuclear palsy, pseudobubar palsy, Huntington's disease, dystonia, dyskinesias, chorea, althetosis, choreothetosis, tics, memory degeneration, taste perception, smooth muscle function, skeletal muscle function, sleep disorders, modulation of neurotransmitters, acute disseminated encephalomyelitis, optic neuromyelitis, muscular dystrophy, myasthenia gravis, multiple sclerosis, and cerebral vasospasm, hypertension, angina pectoris, asthma, congestive heart failure, ischemia related disorders, cardiac dysrhythmias, diabetes, carcinomas, neurocarcinomas, autoimmune-hypertrophy, neuromyotonia (Isaac's Syndrome) muscular disorders associated with drug abuse, and treatment for poisoning.

K+betaM2 polypeptides and polynucleotides have additional uses which include diagnosing diseases related to the over and/or under expression of K+betaM2 by identifying mutations in the K+betaM2 gene by using K+betaM2 sequences as probes or by determining K+betaM2 protein or mRNA expression levels. K+betaM2 polypeptides may be useful for screening compounds that affect the activity of the protein. K+betaM2 peptides can also be used for the generation of specific antibodies and as bait in yeast two hybrid screens to find proteins the specifically interact with K+betaM2 (described elsewhere herein). Based on the expression pattern of this novel sequence, diseases that can be treated with agonists and/or antagonists for K+betaM2 include various forms of generalized epilepsy.